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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,587	02/17/2006	Yasuhito Miyazawa	050070-0106	7100

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EXAMINER:

LOW, LINDSAY M

ART UNIT PAPER NUMBER

3721

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/568,587

Applicant(s)

MIYAZAWA ET AL.

Examiner

Lindsay M. Low

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 11-15 is/are rejected.
- 7) ☒ Claim(s) 5-8, 10, 13, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/17/2006</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

### ***Specification***

2. The disclosure is objected to because it is replete with grammatical and spelling errors. Examples of these errors include: on page 3 in the last paragraph of the section "Background Art," it states, "a pair of a lateral sealers" when it should state, "a pair of lateral sealers." In addition, the word "another" is spelled wrong in the section "Problems that the Invention is to Solve" on page 4 and the word "that" is spelled wrong on page 6 and page 10. On page 22, the rotating circumferential velocity is referred to as "y1" when it has previously been referred to as "V1." On page 30, the blade is referred to as "61b" when it has previously been referred to as "61e" and the holding plates are referred to as "61d" when they have previously been referred to as "61a."

Appropriate correction is required.

### ***Claim Objections***

3. Claims 5-8, 10, and 16-17 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

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4. Claim 13 is objected to because of the following informalities: the word "chat" should be the word "that." Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 13 recites the limitations "said control means" and "said first and second drive means." There is insufficient antecedent basis for the limitations in the claim. This claim depends on the independent Claim 11, which does not mention either of those limitations. Claims 14 and 15 are also rejected because they depend on Claim 13.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3, 9, and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al (4,663,917).

Taylor discloses the same invention including a rotating mechanism for rotating a pair of heat seal rollers 26 composing a laterally sealing mechanism as shown in Fig. 2. Taylor also discloses a vertically moving mechanism, which moves the heat seal rolls upward and downward (Fig. 2) as the bag is being sealed. The seal plates, which are attached to the rolls 26 through arms 17 and 15, move downward as they clamp the bag and return upward after they let go to return to an original position. In addition, the feeding mechanism fills the bags continuously as shown in Fig. 1. The process includes forming the bag by guiding the material into a cylindrical shape and longitudinally sealing it before it is laterally sealed as stated in col. 1 lines 8-20.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-4, 9, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honma et al. (6,374,572 B1) in view of Morrison (5,590,511).

Honma discloses the same invention including a rotating mechanism for rotating a pair of heat seal rolls 8A, which composes the laterally sealing mechanism 8 as shown in Fig. 1. Attached to the rolls are seal plates 14, which have a predetermined seal width. A control unit 13 is used to drive the heat seal rolls by controlling the time at which the lateral sealing rolls 8A work to seal the film F (col. 5 lines 34-37). The filling

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mechanism, which includes the filling nozzle 6 and the material supply unit 7, continuously feeds the material to fill the bags (col. 6 lines 29-41). Homna also discloses the steps of forming the packaging bag P by forming the film F into a cylindrical roll using folding guides 4A. The film F is longitudinally sealed by a sealing mechanism 5 and laterally sealed with the mechanisms 8 and 9. Electronic control units 13 and 19 control the rotating mechanism for the lateral sealing mechanism 8 (col. 5 lines 34-37 and col. 6 lines 42-50). Further downstream in the invention is a cutting mechanism 10 that cuts the film F to make individual packages as the seal plates 14 hold the film (Fig. 1). Homna fails to disclose a vertically moving mechanism to move the heat seal rolls 8A upward and downward.

12. Morrison teaches vertically moving mechanisms 32 and 34, which allow the seal plates 36 to clamp onto the film 10 and move downward as they seal it, then move upward once they let go of the film to return to an original point (Fig. 1). A drive means 100 is used to drive a screw 86 for adjusting the vertically moving mechanism. It is well known in the art to apply a sealer on a film for an extended period of time in order to obtain a more secure seal. The vertically moving mechanism that Morrison teaches holds the seal plates 36 on the film 10 for an extended period of time by moving downward with the film as it seals in order to obtain a more secure seal as Fig. 1 indicates. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a vertically moving mechanism driven by a screw and a drive means in order to move the heat seal rollers upward and downward as they rotate for the purpose of holding the seal plates on the film longer, making a more secure seal.

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Note that the film would have to move at a velocity equal to the velocity of the rotating heat seal rolls plus the velocity of the vertically moving mechanism.

13. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honma et al (6,374,572 B1) in view of Morrison (5,590,511) as applied to Claim 13 and further in view of Naoi (JP10147304).

Homna in view of Morrison discloses the same invention substantially as claimed except for a mechanism for the cutter 10 that moves upward and downward in synchronization with the vertically moving mechanism. Naoi, however, teaches a vertical packaging machine with a vertically moving mechanism 7T that moves the lateral sealers upward and downward. In addition the cutter 9 is also able to move upward and downward in synchronization with the vertically moving mechanism. Both mechanisms are driven by motors 7M and 9Z, which are in turn controlled electronically. The two mechanisms are moved together for the purpose of creating an accurate cut of the lateral seal part of the film (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the mechanism taught by Naoi that allows the cutter to be moved upward and downward in synchronization with the vertically moving mechanism taught by Morrison for the purpose of creating an accurate cut in the lateral seal portion of the film.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takahashi, Hamer et al., Tada et al., Fukuda et al., Heinzer, Miyazaki et al., Howard et al., Monsees et al., Patelli, Moscatelli, and Wylie et al.


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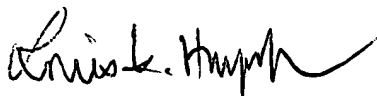
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lindsay M. Low whose telephone number is 571-272-

1196. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LML   
11/27/2006

  
LOUIS K. HUYNH  
PRIMARY EXAMINER